



Establishing Trusted Identities

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Outline

- Challenges
- Current Projects and Solutions
 - ➔ PRIME, IdeMix, EST e-ID, EU MRTD, ...
- Recommendations

Challenges

- Trusted identities
 - Governmental applications (e-voting, taxes, driving licenses, ...)
 - Banking sector
 - Social networks
 - Education (library, student pass, ...)
 - Health care, ...

Challenges

- Diverse security level requirements
 - Authenticity
 - Anonymity
 - Privacy
(limit revealed information
to service providers)
 - ID-theft protection and countermeasures

Challenges

- Multiple identities management
 - How many identities do you have?
 - Different requirements for each identity

Challenges

- Storage and protection of ID material
 - National debate
 - What to store and for how long?
 - What intent will the database be used for?

Current projects and solutions

- PrimeLife, EU research project
 - Privacy and identity management for europe
 - Initially PRIME 2006
 - Aim: protect and maintain life-long privacy
 - Consortium
(universities, private companies, W3C)

Current projects and solutions

- IdeMix, IBM solution
 - Enable privacy in identity management
 - Theoretical results
 - Prototype implemented
 - Pilot phase (universities, government, banks, telecom companies)

Current projects and solutions

- Estonian eID
 - Online banking
 - Public services (health data, pensions, ticketing, ...)
 - Governmental services (e-Tax, e-voting, ...)
 - Company services (telecom, electricity, gas, water, pharmacies, ...)
 - Universities, forums, ...

Current projects and solutions

- EU MRTD
(Machine Readable Travel Documents)
 - EAC: Extended Access Control
 - Biometric passports & eID
 - Based on a network of CVCA's
(Country Verifying Certificate Authorities)

Current projects and solutions

- Swiss database of identities
 - Following May 2009 voting
 - National debate (political not technical)
 - ISA: Informationssystem Ausweisschriften
(Information system for identity documents)
 - Advantages and disadvantages

Recommendations

- National PKI is a pre-requirement
 - AICTO (and ITU?) should provide help (information and trainings for members)
 - Global arab/african authority to reduce costs (CVCA expensive, cross-certification issue)
 - Legal framework might be needed first
 - Tunisian example (but no global solution for all)

Recommendations

- National debate on ID storage
 - Political not technical
 - If needed then
extra cost and extra security needed

Recommendations

- Deployment of MRTD
 - Bio-passports (optional) & eID cards
 - Be patient and learn from others' mistakes

Recommendations

- Adopt applications on top of trusted eID



Questions?